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Guest Opinion:

## Prudential Rules For Private Infrastructure Capital Take Two Steps Forward But Have Yet To Reach The End Of The Road

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## Guest Opinion:

# Prudential Rules For Private Infrastructure Capital Take Two Steps Forward But Have Yet To Reach The End Of The Road

*(Editor's Note: The author of this article is Frédéric Blanc-Brude, the Director of the EDHEC Infrastructure Institute based in Singapore. The thoughts expressed in this Guest Opinion are those of the writer and do not necessarily reflect the views of S&P Global Ratings.)*

In Europe, and further afield, prudential regulatory frameworks are evolving to take into account the characteristics of private infrastructure debt and equity. Important progress has been made under the EU's Solvency II framework, but much calibration work remains to be done. Further down the road, it is investment solutions in infrastructure--as opposed to individual projects--that need to qualify for specific prudential treatment.

## A Big Step Forward: Defining Qualifying Infrastructure

Encouraged by the European Commission, the European Insurance and Occupational Pensions Authority (EIOPA) has now proposed a definition of infrastructure investments that could qualify for a specific prudential risk charge under the Solvency II directive(1). After two years of consultations and discussions, EIOPA has shifted away from its initial focus on using industrial sectors to define infrastructure assets. The proposed definition represents a better and deeper understanding of infrastructure investment: it is contracts, not concrete that matter!

EIOPA's proposed criteria for qualifying infrastructure equity or debt instruments focus on the underlying business model of the firm: for example, the source of income, the strength of counterparties, and the impact of economic regulation. It offers a long list of "business model attributes," but has not yet refined how they should be used; in particular, which ones matter more and how exhaustively should qualifying assets match the list.

That said, this set of criteria has the immense benefit of resting on a serious attempt to understand why infrastructure investment might have a unique risk/reward profile. Already, EIOPA's definition is influencing other prudential frameworks: on Nov. 23, 2016, the European Union Committee (EUC) put forward its latest draft amending the Capital Requirements Regulation (CRR) and Capital Requirements Directive (CRD IV) rules for European banks(2) and highlighted that:

"...it is proposed to grant, under both the Standardized Approach and the Internal Based Approach for credit risk, a preferential treatment to specialized lending exposures aiming at funding safe and sound infrastructure projects. These are defined through a set of criteria able to reduce the risk profile of the exposure and enhance the capacity of institutions to manage that risk. The criteria are consistent with those identifying qualifying infrastructure projects that receive a preferential treatment in the Solvency II framework."

Beyond the EU, other jurisdictions are examining the work done with EIOPA and considering how to define qualifying

infrastructure.

The question of extending qualifying infrastructure assets to so-called "infrastructure corporates" remains to be clarified. Even if the Commission would like to see as many projects as possible qualify under the new rules, introducing too many shades of grey creates the risk of undermining the current definition. Corporates change over time, and management, strategy, and the role of technology affect these businesses in unpredictable ways. Vivendi Universal, Enron, and many others could have qualified as "infrastructure corporates," but were a far cry from project finance special-purpose vehicles and regulated utilities or fixed transport nodes like ports, airports, or pipeline companies.

## **The Quantum Leap: Measuring Performance**

As the draft CRD IV directive quoted above suggests, creating a specific prudential treatment for infrastructure investments implies that lower capital charges are possible and expected (otherwise the energy being invested in changing the framework could be put to better use).

Having identified what infrastructure investing means, the ongoing challenge is to create a meaningful and robust calibration of the Solvency II framework.

The first place EIOPA looked was the capital markets. Listed proxies of private infrastructure debt and equity infrastructure could have provided a direct and easily computed calibration of the required metrics. Unfortunately, this approach turned out to be very unsatisfactory during the previous round of EIOPA consultations.

The various proxies that were put forward and used industrial and revenue filters for "infrastructure-like" stocks exhibited high volatility, value-at-risk, and drawdown risk. In addition, when testing for the "mean-variance spanning(3)" properties of 20 proxies of listed infrastructure, the EDHEC Infrastructure Institute (EDHECinfra) found that it made no difference to an asset owner that had a large and diverse pre-existing investment universe(4). Similar exercises using public bonds also proved unhelpful.

There was one notable exception: a small portfolio of London-listed stocks, which together covers over 200 Public Private Partnerships (PPPs) and Private Finance Initiative (PFI) projects. These projects are "availability based" and the listed entities do not add any extra leverage to what is a listed proxy of U.K. PFI equity. The proxy is sector-agnostic--the underlying assets span roads, schools, and renewables, among others--but focuses on a single infrastructure "business model" and it passed the relevant tests. However, it is small, with a market capitalization of just £5 billion and unique(5). Nevertheless, it provided further evidence of the need for a non-sector-based definition and for a more direct approach to measuring the risk-adjusted performance of a portfolio of private infrastructure investments.

When EIOPA gave its recommendations to the EUC, such benchmarks did not exist. But EDHECinfra is now on the cusp of a significant leap forward. It is completing the latest stages of an ambitious project to create and publish risk-adjusted measures of performance, which have been unavailable until now. The measures will include the value-at-risk, duration, Sharpe ratio, or correlations of representative reference portfolios of private infrastructure debt

and equity.

Thanks to the support of the industry (including the Long-Term Infrastructure Investors Association, of which S&P Global Ratings is a member) an unprecedented data collection exercise is under way, supported by the G20, to implement an applied research program that will allow better calibration of insurance and banking capital charges.

## **The Next Step: Qualifying Products Offering A Clean And Transparent Exposure To Infrastructure**

Important advances in risk calibrations will take place in 2017 and beyond and will allow insurers to invest more in infrastructure. That said, one major issue remains: combining the standard formula approach with such large and illiquid investments means that even the biggest direct infrastructure investors cannot "buy this risk," let alone smaller insurers.

What is the point of adapting the Solvency II standard formula to take into account a theoretical infrastructure market portfolio that no one can buy?

In a recent survey of the insurance industry<sup>(6)</sup>, EDHECinfra identified that asset owners are acutely aware of the lack of investment products that use infrastructure assets productively for them: products that help them meet their own investment objectives. Respondents representing US\$8 trillion of institutional assets under management identified that existing infrastructure funds are rarely well-suited to their needs and that direct investing is fraught with unrewarded risks, especially high concentration in a few large assets.

The future of infrastructure investing rests on the development of full-scale investment solutions that combine the different aspects of private infrastructure projects to optimize diversification benefits, liquidity, performance, and duration.

Such solutions, if well-designed, documented, and sufficiently transparent, could be "standard-formula" compatible, that is, even small insurers could gain exposure to the characteristics of private infrastructure debt and equity, and, with adequate benchmarks, do so in the knowledge that it supports their investments objectives.

## **Endnotes**

1) COMMISSION DELEGATED REGULATION (EU) 2016/467 of Sept. 30, 2015 amending Commission Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for several categories of assets held by insurance and reinsurance undertakings.

2) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements and amending Regulation (EU) No 648/2012.

3) A series of statistical tests showing whether the Markowitz mean-variance efficient frontier is entirely shifted to the left when test assets are added to an existing well-diversified portfolio, thus signaling a new asset class.

4) See Blanc-Brude, Whittaker and Wilde, 2017, forthcoming in the Journal of Financial Markets and Portfolio Management.

5) See EDHEC's contribution to the EIOPA consultations for more details.

6) Blanc-Brude, Chen and Whittaker, 2016, Towards better infrastructure investment products, EDHEC Infrastructure Institute-Singapore.

## **Related Criteria And Research**

### **Related Research**

- Solvency II Could Be A Double-Edged Sword For Infrastructure Investment, July 7, 2014
- Investing In Infrastructure: Are Insurers Ready To Fill The Funding Gap?, July 7, 2014

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